HIGH-FIDELITY AUTOMATIC
STEREO TURNTABLE

PL-A35

PV
PVT

OPERATING INSTRUCTIONS

PIONEER®

Thank you for the confidence you have shown us in purchasing this Pioneer Fully Automatic Stereo Turntable. For the benefit of using your favorite stereo phono cartridge, the PL-A35 is not equipped with a factory-mounted cartridge. Although any standard stereo phono cartridge can be mounted, we recommend the use of a high-quality magnetic type cartridge.

FEATURES

PROFESSIONAL PERFORMANCE YET EFFORTLESS OPERATION

This Pioneer model combines studio-quality performance with the operational ease of a fully automatic. Simply flick the function lever to START position once, and the tonearm will be automatically moved over and lowered onto the record and, at the end of the disc, will return automatically to its rest. One-touch CUT and REPEAT features let you interrupt and repeat any record freely.

SYNCHRONOUS MOTOR AND BELT DRIVE

The turntable platter is driven by a synchronous 4-pole motor of excellent stability independent from power voltage fluctuations. The drive belt is precision-finished on both sides, a feature that helps reduce wow and flutter to an absolute minimum. (The tonearm is moved by a separate, geared motor.)

ANTI-SKATING DEVICE

Model PL-A35 features an effective countermeasure against skating (excess pressure of the stylus against the inner wall of the record groove).

The anti-skating device keeps the stylus correctly balanced in the groove and assures perfect tracking.

DIRECTLY READABLE TRACKING FORCE ADJUSTMENT

The tracking force is adjustable over a wide range so that practically any cartridge (with standard EIA plug) can be accommodated. The balance weight is equipped with a gauge for easy, direct reading of the tracking force.

HIGH QUALITY MAGNET-TYPE CARTRIDGE SUPPLIED

The supplied cartridge, Pioneer model PC-50, is a magnetic type of very true-to-the-record sound quality and a frequency response from 10 to 25,000 Hz. Its stylus is a durable diamond type.

"FREE HINGE" DUST COVER

The transparent dust cover is held by spring-loaded hinges and can be arrested in any desired position. If desired, it can be removed altogether.

OILED WALNUT BASE

Adds an extra touch of value and elegance to your stereo installation.

INSTALLATION

Install the PL-A35 with the following points in mind.

- The place must be well-ventilated and free from humidity and dust.
- The unit should not be exposed to direct sunlight.
- The unit should not be placed near any source of heat.
- The unit should be placed as far from the speaker systems as possible.

TYPICAL STEREO SETUP

The diagram shows a typical installation, and the relationship of turntable, amplifier or receiver and speakers (Fig. 1).

LINE VOLTAGE AND FREQUENCY

Confirm the line voltage and frequency of your house current before turning power on, because your PL-A35 may not be conditioned for operation with the local line voltage and frequency.

LINE VOLTAGE

- The LINE VOLTAGE SELECTOR SWITCH, provided inside the turntable, can be seen when the bottom plate is opened.
- Fig. 2 shows the location of the line voltage selector switch and metal stopper. Remove the screw, to free the metal stopper.
- Set the selector switch to the local voltage, hold the switch in position with the metal stopper, and tighten the screws.

AC FREQUENCY (CYCLES)

The speed of the motor depends upon the frequency (cycles) of the AC power supply, which can be either 60Hz (USA, etc.) or 50Hz (most European countries, etc.).

The turntable is, of course, factory-adjusted for the AC frequency of the country to which it is being shipped. So, no readjustment is usually required if you use the unit in the same country or area where you bought it.

If you move to another country or region, however, please find out if the AC frequency is the same as at your former place of residence – if so, no problem. If it is different, your turntable must be readjusted as follows:

1. Remove the turntable platter. Now the motor pulley is accessible. The pulley is fastened to the motor shaft by one little screw. Remove this with the supplied screwdriver, and remove the pulley.
2. Set the speed selector lever at 33 RPM position.
3. Attach the supplied spare motor pulley and fasten it with the screw removed in step 1. Do not tighten the screw firmly, yet. Then set the turntable platter on the unit and lead the drive belt around the pulley.
4. The belt should be positioned in the belt guide and around the center of the upper (smaller) part of the motor pulley. To achieve this, it may be necessary to loosen the pulley once more and adjust its height. See Fig. 3.
5. Turn the unit on and confirm that the belt travels smoothly through the belt guide and around the pulley.

HOW TO DISTINGUISH THE MOTOR PULLEYS

Pulley for 50Hz AC:	larger diameter
Pulley for 60Hz AC:	smaller diameter, also has a groove in its lower part.

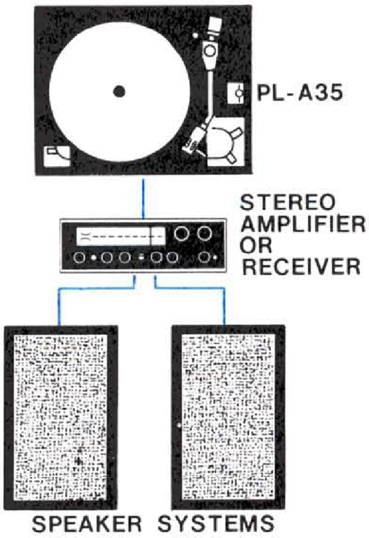


Fig. 1

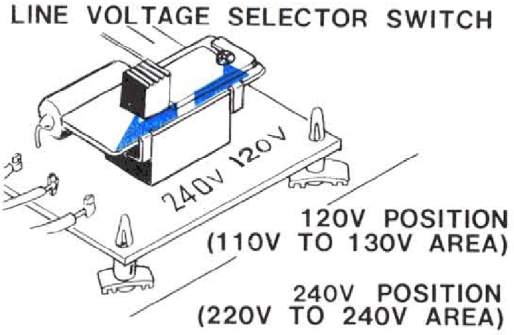

LINE VOLTAGE SELECTOR SWITCH
240V
120V
120V POSITION (110V TO 130V AREA)
240V POSITION (220V TO 240V AREA)

Fig. 2

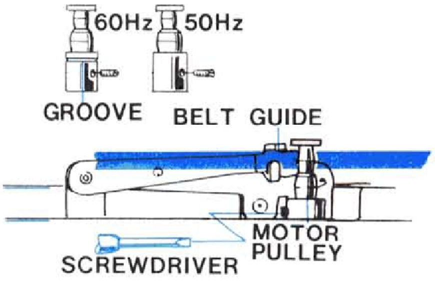


Fig. 3

ASSEMBLY

To prevent possible damage in transit, precision parts and the turntable platter are packaged separately from the wooden base in the same packing case.
Carefully unpack all parts and assemble the unit correctly by referring to the following illustrations and steps.

CLAMP SCREWS

Remove the two clamp screws shown in Fig. 4 with the furnished screwdriver. After removing both screws (2), fit the supplied rubber bush into the hole.

TURNTABLE PLATTER

The turntable platter is packed separately. Take it out and put it on the center shaft. Place the rubber mat on the platter after the drive belt has been set on the motor pulley.

DRIVE BELT

Set the speed selector switch to 33 RPM position. Put the drive belt through the belt guide by pulling the ribbon attached to the drive. Then set the belt on the smaller portion (the upper portion) of the motor pulley, using the ribbon. Then remove the ribbon (Fig. 5).

TONEARM PROTECTOR

As illustrated in Fig. 6, open and remove the white plastic cushion securing the tonearm.

TONEARM ASSEMBLY

COUNTERWEIGHT

Mount the counterweight on the rear of the tonearm and push it inward as far as it will go. Then, give it two or three turns clockwise (Fig. 7).

ASSEMBLY OF ANTI-SKATING DEVICE

The anti-skating device consists of two angle bars: "A" and "B", each of which has a thread tied to a small bias weight.

- Mount bar "A" on the base plate with the attached screw. The horizontal section of the bar should be parallel with the tonearm and point toward the tail end of the arm.
- Hang the thread from bar "B" over bar "A," as shown in Fig. 8.
- For adjusting anti-skating of the tonearm, choose one of two kinds of bias weight (aluminum-made: lighter in weight: brass-made: heavier) in accordance with the corresponding tracking force of phono cartridge to be used (Fig. 8).

  Refer to the following:

TRACKING FORCE	BIAS WEIGHT
lighter than 2g	aluminum-made
heavier than 2g	brass-made

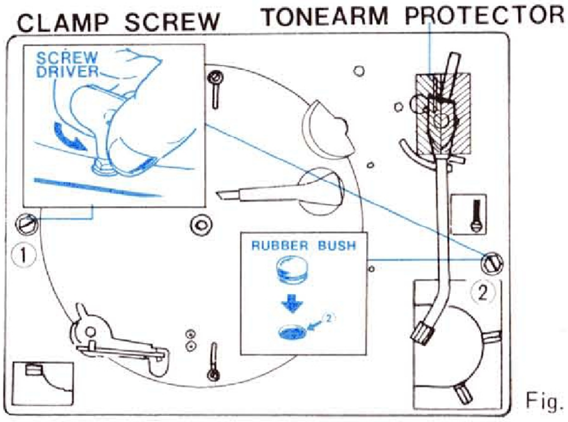


Fig. 4

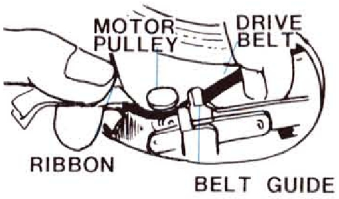


Fig. 5

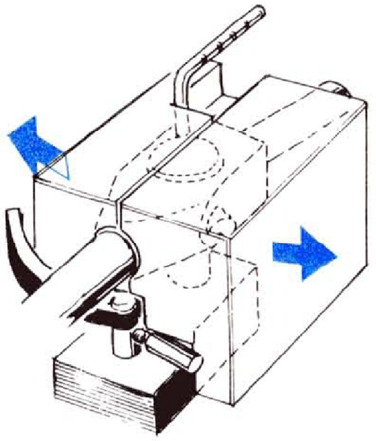


Fig. 6

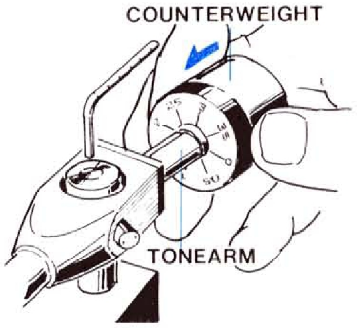


Fig. 7

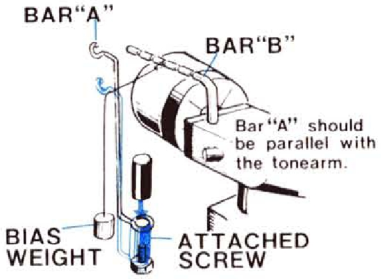


Fig. 8

ARM HEAD

Insert the arm head into the tonearm sleeve and lock it in place by turning the locking collar (Fig. 9).
Then, untie the ribbon fastening the tonearm to the arm rest.

NOTE: In some parts of the world, model PL-A35 is delivered without cartridge. If yours is one of these, purchase any high quality magnetic type stereo cartridge and install it as described in paragraph "EXCHANGING THE CARTRIDGE" below.

DUST COVER

Attach the plastic dust cover by sliding the cutouts in the fasteners (on the cover) over the hinge pegs (on the base) as shown in Fig. 10. The hinge is designed to hold the cover open at any angle from 30° to 60°.

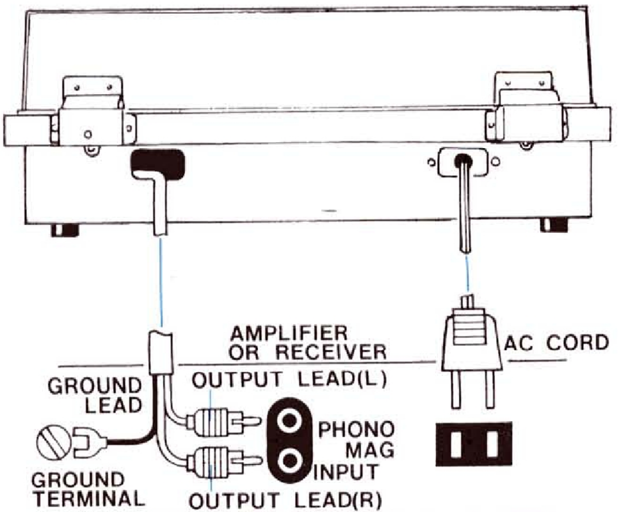
EXCHANGING THE CARTRIDGE

When changing a cartridge, be sure to connect the lead wires correctly between cartridge pins and pin plug. After a cartridge has been mounted in the arm head, the arm overhang must be readjusted as follows: First, tighten the cartridge mounting screws somewhat but not completely. Then, inch the cartridge back and forth to obtain proper overhang, and finally tighten the screws securely (Figs. 11 and 12).

CONNECTION TO STEREO AMPLIFIER OR RECEIVER

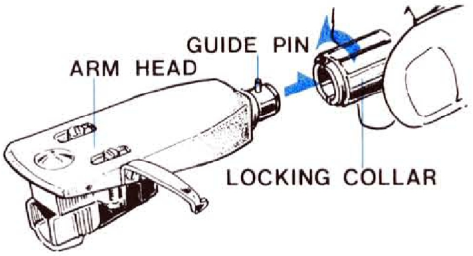
The cartridge supplied with the PL-A35 is an induced magnet type. Use the PHONO MAG input jacks of your amplifier for connection to the PL-A35.

- Connect the lead marked "L" to the left channel input jack and the lead marked "R" to the right channel jack. The third wire is a ground lead with a split lug on its end. Connect the split lug to the ground terminal on the amplifier (Fig.13).



AMPLIFIER OR RECEIVER
AC CORD
GROUND LEAD
OUTPUT LEAD(L)
PHONO MAG INPUT
GROUND TERMINAL
OUTPUT LEAD(R)

Fig. 13



GUIDE PIN
ARM HEAD
LOCKING COLLAR

Fig. 9

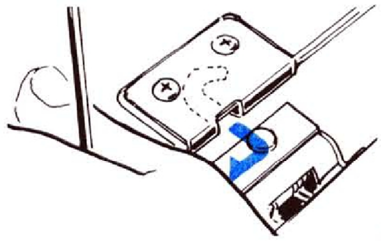
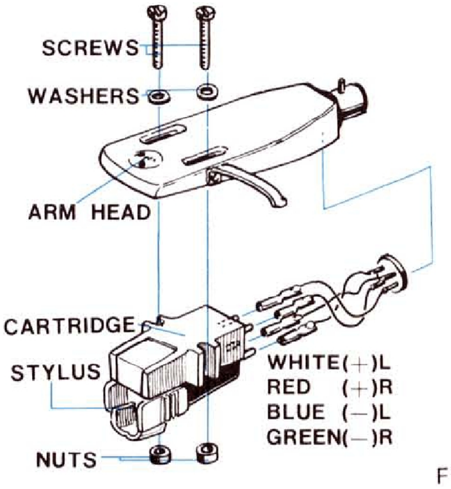
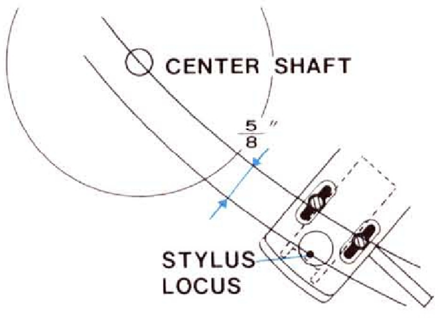


Fig. 10



SCREWS
WASHERS
ARM HEAD
CARTRIDGE
STYLUS
WHITE(+)L
RED (+)R
BLUE (−)L
GREEN(−)R
NUTS

Fig. 11

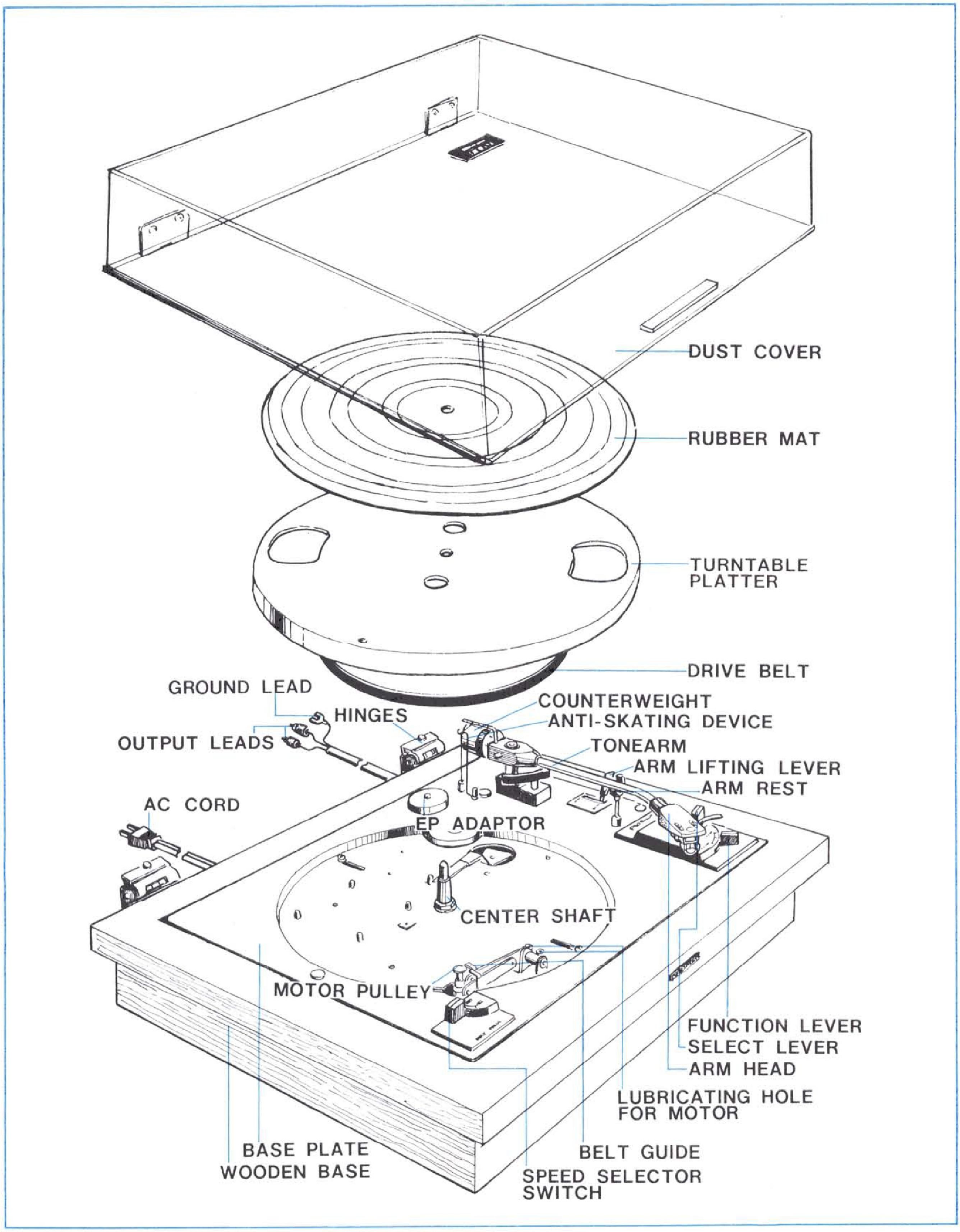


CENTER SHAFT
5/8″
STYLUS LOCUS

Fig. 12

PLUGGING AC CORD

If the AC cord plugging should cause much hum, re-plug the cord with its plug-pins reversed and such hum may be eliminated.


DUST COVER
RUBBER MAT
TURNTABLE PLATTER
DRIVE BELT
GROUND LEAD
HINGES
COUNTERWEIGHT
ANTI-SKATING DEVICE
OUTPUT LEADS
TONEARM
ARM LIFTING LEVER
ARM REST
AC CORD
EP ADAPTOR
CENTER SHAFT
MOTOR PULLEY
FUNCTION LEVER
SELECT LEVER
ARM HEAD
LUBRICATING HOLE FOR MOTOR
BASE PLATE
WOODEN BASE
BELT GUIDE
SPEED SELECTOR SWITCH

ADJUSTMENTS

TRACKING FORCE ADJUSTMENTS

With the tonearm off the arm rest, turn the counterweight in either direction until the tonearm is in perfect horizontal balance. A tracking force dial ring is provided at the front of the counterweight. While holding the counterweight in position, turn the dial ring until the 0 mark on the dial aligns with the black index line engraved on the tonearm. The tracking force is now zero (Fig. 14).

Now, turn the counterweight together with the tracking force dial (the dial is calibrated up to 4 grams in steps of 0.5 gram).

Set the tracking force at 1.5 ~ 2.1 grams which is optimum for the supplied PC-50 cartridge.

When using another type of cartridge, adjust the tracking force according to the instructions supplied by the cartridge manufacturer (Fig. 15).

ANTI-SKATING DEVICE

Bar "B" of the anti-skating device has five thread positions corresponding to tracking force values as shown in Fig. 16. If the tracking force is 1.5 to 2 grams, for example, the thread with the aluminum-made weight furnished must be set in the 1st notch on the bar arm, if the tracking force is 2.1 to 2.5 grams, the thread with the brass-made weight furnished, too, must be set in the 2nd notch.

ARM ELEVATION ADJUSTMENT

The tonearm is raised and lowered by the arm elevator under control of the function and tonearm lifting levers. The elevation, i.e. the stroke for the tonearm to travel up and down, can be adjusted by loosening the screw shown in Fig. 17. Usually, this adjustment is not required.

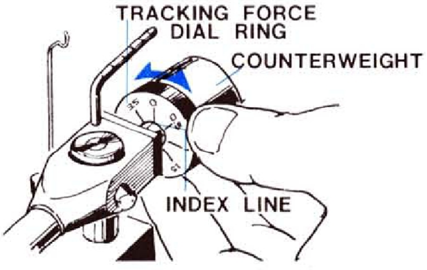

TRACKING FORCE DIAL RING
COUNTERWEIGHT
INDEX LINE

Fig. 14

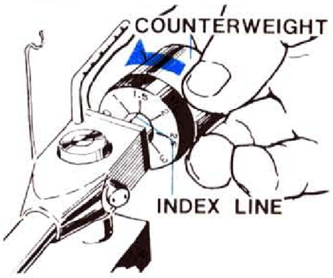

COUNTERWEIGHT
INDEX LINE

Fig. 15

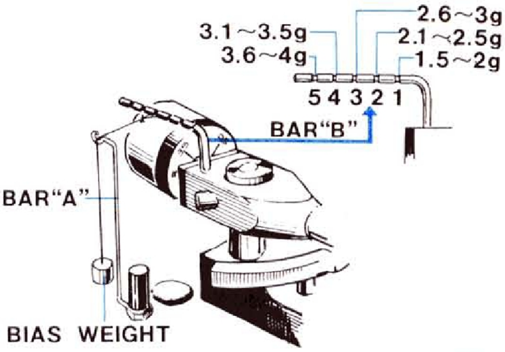

3.1~3.5g
3.6~4g
2.6~3g
2.1~2.5g
1.5~2g
5 4 3 2 1
BAR"B"
BAR"A"
BIAS WEIGHT

Fig. 16

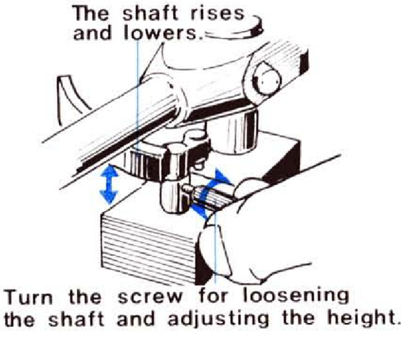

The shaft rises and lowers.
Turn the screw for loosening the shaft and adjusting the height.

Fig. 17

OPERATING CONSIDERATIONS

CORRECT HANDLING OF FUNCTION LEVER

Always move function lever quickly and release it immediately. Do not touch the tonearm while it is in motion.

KEEP THE STYLUS ALWAYS CLEAN

Dust on the stylus affects the sound quality. Clean the stylus frequently with a soft brush. Care must be taken not to touch it with your fingers. Also, the records must be kept clean.

CHANGE TURNTABLE SPEED ONLY WHEN THE TURNTABLE IS ROTATING

In the belt drive system, the turntable speed is changed by shifting the belt up or down on the stepped motor pulley by the speed selector switch. The speed can be changed only while the turntable is rotating.

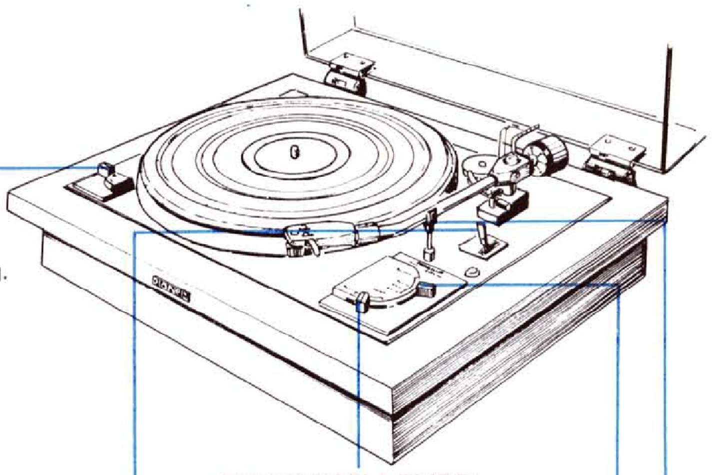
NEVER OBSTRUCT THE ROTATING TURNTABLE BY HAND

Stopping the rotating turntable by hand may cause the belt to move off the pulley and can lead to stretching of the belt.

AVOID SHOCKS AND VIBRATION

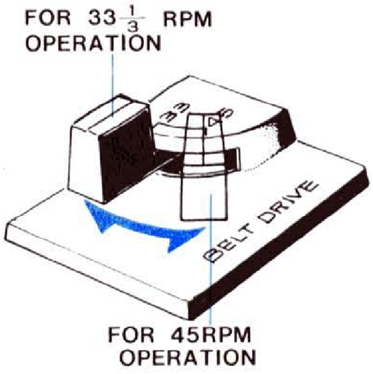
Model PL-A35 operates with a very small stylus tracking force. It should be in a stable position. Also, keep the unit as far apart from the loudspeakers as possible.

OPERATION

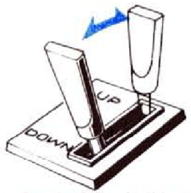


SPEED SELECTOR SWITCH

Speed can be changed only while turntable platter is rotating.



ARM LIFTING LEVER



UP·········Set the lever in this position when you wish to stop playing the record temporarily.

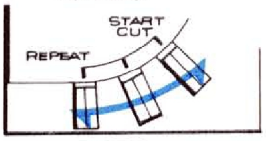
DOWN···Set the lever in this position normally.

ARM REST

Adjust arm rest to same height as tonearm elevator.

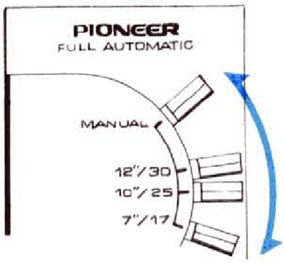
FUNCTION LEVER

START/CUT	For starting record play and stopping it in midway.
REPEAT	For playing the same record repeatedly.



SELECT LEVER

MANUAL	For manual operation
12"/30	For playing 12"(30cm)
10"/25	For playing 10"(25cm)
7"/17	For playing 7"(17cm)
	LP or EP record



AUTOMATIC PLAY

1. Make sure that the arm lifting lever is in DOWN position.
2. Set the select lever to the size of the record to be played: 12"(30cm), 10"(25cm) or 7"(17cm).
3. Check the position of the speed selector switch. If record speed and speed selector switch do not agree, reset the speed selector lever as follows:

(A) Set the select lever to MANUAL position.

(B) Set the function lever to START/CUT position and immediately release the lever. The turntable will start rotating. Then set the speed selector lever to the correct speed.

(C) Move the function lever to START/CUT position again. The turntable will stop.

NOTES:
- The speed select lever must be reset only while the turntable is rotating.
- Whenever the turntable is rotated for a speed change be sure to keep the select lever in MANUAL position.

4. Free the stylus cover from the stylus by pulling it forward.
5. Set the function lever to START/CUT position. The turntable will begin rotating, and the tonearm will automatically move over and float down onto the record.
6. At the end of the record, the tonearm will automatically return to the arm rest and the turntable will stop.

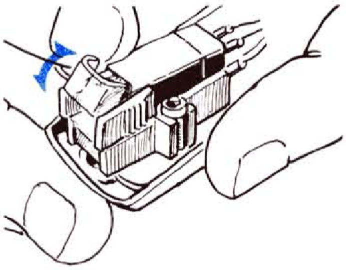


Fig. 18

STARTING THE PLAY FROM A POINT MIDWAY IN THE RECORD OR MANUAL PLAY

1. Set the select lever to MANUAL position, the arm lifting lever to DOWN.
2. Move the tonearm over the spot from which you want to play the record.
3. Set the function lever to START/CUT position, then release it. The tonearm will float down onto the record.
4. When playback ends, the tonearm will automatically return to the arm rest, and the turntable will stop.

INTERRUPTING PLAYBACK

To interrupt playback, move the function lever to START/CUT position and release the lever. The tonearm will return to the arm rest and the turntable platter will stop.

REPEAT PLAYBACK

With the function lever set the REPEAT position, the unit will automatically repeat the same record again and again.

ARM LIFTING LEVER

This lever is used to lift and lower the tonearm. Setting the lever to DOWN position will quietly float the arm down, and UP position will float the arm up from the record.
Normally, the lever should be set to DOWN position.

STYLUS REPLACEMENT

The stylus that comes with the unit is a diamond tip, PN-50. It should last about 1,200 to 1,500 hours of operation. Don't use the stylus longer than that because a worn stylus may damage the records or produce distorted sound. When replacing the stylus, unplug the arm head from the arm, and pull out the stylus together with its holder diagonally.
Replace the stylus unit with a new one (Fig.19).

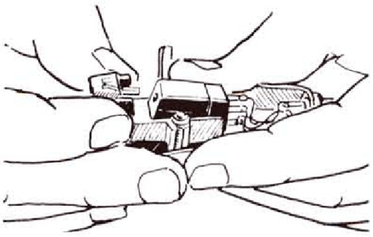


Fig. 19

STYLUS DROP POINT ADJUSTMENT

It is not usually necessary to readjust the stylus drop point. If necessary, remove the rubber bush and with the tonearm resting on the arm rest, set the select lever to 12," 10", or 7" position and adjust the adjusting screw with a screwdriver. If the stylus touches down too far out, turn the screw clockwise; and if the stylus touches too far in, turn the screw counterclockwise (Fig. 20).

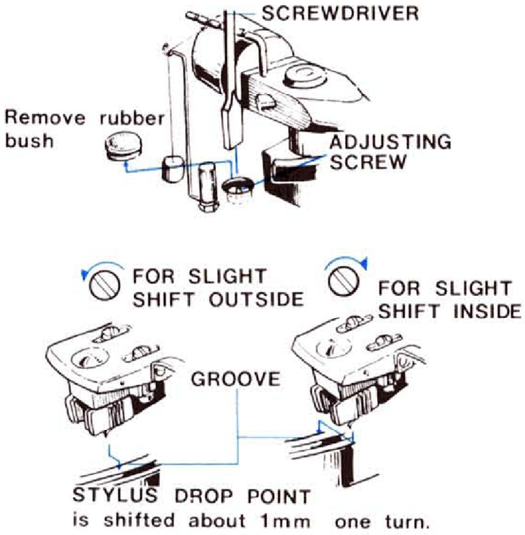

SCREWDRIVER
Remove rubber bush
ADJUSTING SCREW
FOR SLIGHT SHIFT OUTSIDE
FOR SLIGHT SHIFT INSIDE
GROOVE
STYLUS DROP POINT
is shifted about 1mm one turn.

Fig. 20

LUBRICATION

Mechanical noises, wow and flutter usually result from lack of lubricant in rotating parts. In extreme cases, lack of lubricant may cause the motor to freeze. Lubricate the specified spots at least once every two months if the PL-A35 under regular home use. One lubricating point is shown in Fig. 21. Also lubricate the center shaft of the turntable. Apply one or two drops of oil. Care must be taken not to put any oil on the motor pulley or belt. If this should happen, wipe with a soft cloth moistened with alcohol.

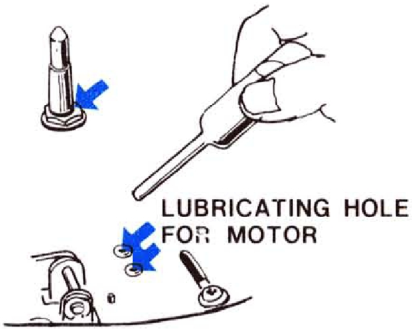

LUBRICATING HOLE FOR MOTOR

Fig. 21

SPECIFICATIONS

MOTOR AND TURNTABLE

Motor:	4-pole synchronous motor
Turntable drive:	Belt-driven
Speed:	Two speeds, 331/3 and 45rpm
Speed accuracy:	1.0% or less
Wow and flutter:	0.1% (WRMS) or less
S/N:	47dB or more
Turntable platter:	12" (30cm) diameter aluminum alloy

TONEARM

Tonearm type:	Static balance type, pipe arm (S-shaped)
Effective arm length:	221mm
Usable cartridge weight:	4 ~ 10g
Furnished cartridge:	PC-50

SUBFUNCTIONS

Anti-skating device control
Fully automatic tonearm
Light aluminum head shell plug-in type
Dust cover with free stop hinge
Wooden base with anti-acoustic feedback suspension
Counterweight with tracking force adjustment gauge
Hydraulic cueing device

FURNISHED ACCESSORIES BIAS WEIGHT

Lubricator	1	EP abapotor	1
Screwdriver	2	Motor pulley	1
Bias weight:		Brass-made	1
		Aluminum-made	1

MISCELLANEOUS

Power requirements:	AC, 110, 117, 130, 220 or 240V. 60Hz, 50Hz
Power consumption:	19W MAX.
Dimensions:	18-7/8(W) x 16-3/8(D) x 7-3/16(H) in. 480(W) x 415(D) x 183(H) mm
Weight:	19 lb 14oz. 9kg

FURNISHED CARTRIDGE

Type:	Induced magnet type (PC-50)
Frequency response:	10Hz to 25,000Hz
Channel separation:	More than 25dB at 1,000Hz
Output voltage:	3mV at 1,000Hz (5cm/sec. or 2 ips)
Load impedance:	50kΩ
Stylus:	0.5 mil diamond (PN-50)
Compliance:	12 x 10^{-6} cm/dyne at 100Hz (dynamic) 22 x 10^{-6} cm/dyne (static)
Tracking force:	1.5 to 2.1 g
Weight:	0.21 oz 6g
Mounting:	Conforms to the EIA standards 1/2 inch (12.7 mm)

NOTE: Specifications and the design subject to possible modifications without notice due to improvements.

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PRINTED IN JAPAN
<KRB-013-A>

<72J04Y54B>

LUBRICATION

Before applying oil to the turntable, remove the turntable platter by using the following procedure:

1. Return the tonearm onto the arm rest, then support the tonearm with the arm clamper of the arm rest.
2. Remove the drive belt with fingers from the motor pulley.
3. Pull the turntable platter upward with two fingers inserted into the turntable platter's two openings.
   If the turntable platter should not be removed easily, pull it up strongly, with care taken not to damage any part of the turntable.

WHEN LUBRICATION IS REQUIRED . . .

Mechanical noises and wow and flutter usually result from the lack of lubricant in rotating parts. Lubricate the specified spots at least once every two months if your turntable is used for home entertainment, and two to three if used for professional purposes. Apply one or two drops to the base of the center shaft.

When lubricating, be careful not to let oil adhere such as the motor pulley, belt, or inner rim. If oil should adhere to these parts, wipe it off with a cloth moistened with pure alcohol.

WHEN LUBRICATION IS OVER . . .

Replace the turntable platter on the center shaft, then re-set the drive belt around the motor pulley.

<72G03F01S>

Printed in Japan
<KRG-010-O>

CAUTION

This stereo turntable has been set for operation in area where line voltage is somewere between 220V and 240V. If the unit is to be used in the area where line voltage is somewhere between 110V and 130V, set the line voltage selector switch to 110~130V position.

<R19-123-B>
printed in Japan